#52.

· · ·

# "Tracer Evaluation of Diagnosis and Treatment of EPSDT Referrals"

# PHASE I REPORT

Ruben Meyer, M.D., Project Director Beverly J. Lingle, M.A., Principal Investigator

> Program in Maternal and Child Health School of Public Health The University of Michigan

Information Resource Center

EPSDT 6.56

ā Lota Liek

REPORTS RJ 102 .5 M5 M49 1975

.

IE

E

• • •

RJ 102.5 .MS M49 1975

"Tracer Evaluation of Diagnosis and Treatment of EPSDT Referrals"

# PHASE I REPORT

CAS Library C2-07-13 7500 Security Blvd. Baltimore: Maryland 21294

Ruben Meyer, M.D., Project Director Beverly J. Lingle, M.A., Principal Investigator

> Program in Maternal and Child Health School of Public Health The University of Michigan



I.	Intr	oduction	Page 1
TT.	Нуро	theses	-
TTT	De al contra 6 Martin la la contra		11
· · ·	Deve	·	τ1
	A.	Identification and selection of tracers	11
	В.	Development and provider review of minimal care plans	18
	с.	Design of abstract forms	23
	D.	Preliminary plans for analysis	25
IV.	Stud	y Population	27
	Α.	Definition of the study population,	27
	в.	Size of the study population	32
۷.	Supp	ort Activities	
	Α.	Administrative considerations	
	в.	Personnel	
	с.	Pretest Arrangements	
VI.	Арреі	ndices	
	I.	Selection of Tracer Condition Candidates	A-1
	II.	Minimal Care Plan	A-3
	III-A.	Community Providers	A5
	III-B.	Specialist Providers	A-6
	IV.	Minimal Care Plan Checklist	A-11
	۷.	Minimal Care Plan-Discussion Paper	A-17
	VI-A.	EPSDT Screening Abstract Form	A-22
	VI-B.	Provider Data Summary Form	A-28
	VI-C.	Patient Interview Form	A-35



		Page	
VII.	Decision Procedure for Inclusion in Study Population	A-43	
VIII.	Dr. Maurice Reizen's letter regarding Public Act 39	A-44	
IX.	Participants, Progress Report Meeting, February 5,1975	A-46	

.

/

ſ

This document is a complete and detailed report of activities of The University of Michigan study team during Phase I of the project, "Tracer Evaluation of Diagnosis and Treatment of EPSDT Referrals," (SRS Grant #11-P-57761/5-01). It is intended to be inclusive of all information contained in earlier, interim reports.

In the evaluation of the quality of medical care, little has been accomplished in formulating specific measurement procedures for the objective evaluation of medical care processes and outcomes, and the relationship between them. The research objective of this project is to evaluate the adequacy, appropriateness, and impact of care in diagnosis and treatment of patients referred under the EPSDT program. The tracer method, originally developed by David Kessner, has been adapted for this purpose.\*

Adaptation of the tracer method to the Michigan EPSDT setting has been the major activity during Phase I. Theoretical areas which were considered in depth are described below, and can be divided into five broad categories: development of hypotheses; identification and selection of tracers; development of minimal care plans; definition of the study population; and determination of sample size.

\*See David M. Kessner and Carolyn Kalk, <u>A Strategy for Evaluating</u> <u>Health Services</u>. Institute of Medicine, National Academy of Sciences, Washington, D.C., 1973.



Administrative relationships have been developed with Michigan Department of Social Services, (MDSS), Michigan Department of Public Health, (MDPH), and with physicians and their professional organizations. Detailed descriptions of administrative arrangements are at the end of this report, covering these relationships, as well as personnel activities and Pretest arrangements.

This report concludes Phase I of this project, and marks the beginning of the Pretest in Washtenaw County.



# II. HYPOTHESES

A number of hypotheses have been formulated in order to examine in detail the quality of care received by persons referred for diagnosis and treatment under the EPSDT program. Tests of these hypotheses will demonstrate the influence of certain factors on the adequacy and impact of medical care. The factors to be measured can be grouped into three broad categories: characteristics of the provider, characteristics of the screening clinic, and characteristics of the patient. The schematic diagram on the following page illustrates conceptual relationships which will be investigated.

Before describing the nature of the hypotheses regarding these relationships attention should be drawn to the major hypotheses underlying this entire investigation. They are implicit in the objectives and the statement of purpose of the project.

- A. Care provided after screening in the EPSDT program is adequate or more than adequate care 70% of the time.\*
- B. Care provided after screening in the EPSDT program has impact.
- C. Adequacy of care is positively related to impact.
- D. There is a relationship between adequacy of care and compliance.
- E. There is a relationship between compliance and impact of care.

<sup>70%</sup> is an estimate which will be used for the Pretest, and revised if necessary.

Bependent 6 (70%) 4 = "affects" 8 ω 8 S  $\infty$ 5 Independent HYPOTHESES TMPACT 8.  $\Sigma$ 2 \_ Z  $\mathbf{Z}$ 0 0 2 Q Q B E Γı М COMPLIANCE . . . Number 15a.  $14_{A}$ . ġ, 13. 12. 11. 10. 5. Α. в. <del>ن</del> р. н Ш 2. 4. 8 .6 \* FOLLOWdn.6 6. ADEQUACY OF CARE 0. Ethnicity same CHARACTERISTICS TREATMENT OF PATIENT N. Ethnicity as provider 5. WITH ADEQUACY AND IMPACT OF CARE DIAGNOSIS 4. K. Refers for conditions not H. Referral to primary care J. Provides service at time I. Detail of referral form presently acute (history) M. Conducts follow-up on L. Conducts follow-up on Î INDEPENDENT VARIABLES OF SCREENING. CLINIC appointment keeping CHARACTERISTICS APPOINTMENT KEPT screening care status ÷. provider Î of REFERRAL A. In same organization 2. B. Has previously seen D. Number involved in E. In group practice as screening clinic F. Foreign trained CHARACTERISTICS T OF PROVIDER SCREENING C. Rural patient G. Age care

SCHEMATIC DIAGRAM OF RELATIONSHIP OF HYPOTHESES TO VARIABLES ASSOCIATED



Here and throughout this section, adequacy, impact, and compliance are defined as follows:

- "adequacy" = A discrete quantitative measure of quality of health care. Adequate or inadequate will depend on the degree to which care has met the specified standards of the minimal care criteria. (See Section III B) Appropriate, as a qualitative measure of care, is subsumed under adequacy.
- "impact" = A measure of the degree to which movement has been made toward tracer-specific treatment goals.
- "compliance" = A measure of whether prescribed behavior regarding a tracer episode has been followed, i.e. prescriptions filled, drugs taken, or followup appointments kept.

These five hypotheses are at the core of the project and as such are often tacitly assumed to be "givens." Thus, it bears repeating that this project will be investigating the adequacy and impact of diagnosis and treatment programs, testing the relationship between adequacy, compliance and impact, and measuring the influence of the various independent variables associated with the EPSDT program. The remaining hypotheses are stated in null hypothesis form and briefly explained below.

A. Hypotheses Regarding Characteristics of the Provider

 There is no relationship between adequacy of care and whether care is provided by the same organization that conducted the screening.

"organization" = same administrative unit with a single record system, and same staff involved in screening and care.

The intent here is to direct attention to the question of whether referrals to comprehensive care clinics such as PRESCAD in Detroit receive better quality care than refer-

rals to a fragmented system of unallied providers.

 There is no relationship between adequacy of care and whether the patient has previously received care from the same provider.

"same provider" = same physician, practice or clinic "previously" = within past two years Analysis of this question should enable recommendations concerning whether screening clinics should refer patients to familiar providers. There is, of course, the problem that results will be influenced by whether the provider is a primary care provider or a specialist. The client is more apt to have seen a primary care provider than a specialist; this will have to be taken into account.

- 3. There is no relationship between adequacy of care and the rurality of providers. "rurality" = proximity of primary care providers to appropriate specialist. The size of the rural study group will dictate whether testing this hypothesis will be possible.
- 4. Adequacy of care is not influenced by the number of different providers involved in diagnosis and treatment of the patient's specific tracer condition.

This hypothesis may have implications for referral patterns where the simultaneous problems of fragmentation and increased cost are of concern. The study group will be divided into



those patients whose minimal care plans dictate no referrals are necessary and those who should be seen by more than one provider. Here, and perhaps for all hypotheses, a control may be instituted for severity of tracer condition.

- 5. Adequacy of care is not influenced by whether the provider works in a multiple specialty group, single specialty group, or solo/partnership setting.
  - "multiple specialty group" = American Medical Association definition:\* three or more practitioners providing service in at least two fields of practice or major specialty. Hospital outpatient departments are included here.
  - "single specialty group" = American Medical Association definition: three or more practitioners providing service in only one field of practice or major specialty. General practice groups are classified here as single specialty.

"solo/partnership" = one or two practitioners

This hypothesis addresses the question concerning the organization and delivery of quality care, and may again have implications for screening clinic referral patterns. Analysis of this hypothesis will be restricted to those tracers whose minimal care plans call for only one referral.

6. Adequacy of care is not influenced by whether the provider is a foreign medical graduate or domestically trained. "domestically trained" = United States and Canada

Balfe, B.E. and McNamara, M.E., <u>Survey of Medical Groups in the U.S.</u>, 1965, American Medical Association, Chicago, 1968, p. 3.



Studies have shown that foreign medical graduates do not rate as high as domestically trained physicians on scales such as board certification scores. This project will attempt to examine the relationship between foreign medical graduate status and adequacy and impact scores.

7. Adequacy of care is not related to the age of the provider.

Analysis may serve to corroborate other studies in the field.

## Β. Hypotheses Regarding Characteristics of the Screening Clinic

8. Adequacy of care is not influenced by whether the initial clinic referral is to a primary care provider or to a specialist.

"initial referral"

= referral directly from screening to a physician

"primary care physician" = pediatrician, general practioner,

"specialist"

- internist, outpatient pediatric. department, general medicine, or neighborhood health center
  - = otolaryngologist, nephrologist, neurologist, dermatologist, outpatient department specialty clinic, surgeon, etc.

The possibility has been raised that initial referral to a specialist for such conditions as tonsillitis or umbilical hernia may lead to unnecessary surgery. This hypothesis will be tested by grouping tracers according to what the minimal care plans define as appropriate initial referral. Analysis may result in specific recommendations to the EPSDT program regarding referral practices.

E

E

E

1

T

Γ

-

T

E

L

I

I

 Adequacy of care is not related to the detail on the screening form.

The supposition is that the greater the detail on the screening referral form, the greater the likelihood that the provider will provide adequate care. Analysis here may provide useful recommendations to clinic personnel regarding the most efficient and effective use of referral forms.

10. Impact of care is not influenced by whether screening personnel provide any service beyond screening.

"service" = at this time service refers to counseling. However, an open ended question at the patient interview may reveal other forms of service.

From individual patient interviews, the project team will try to determine whether the patient was influenced in some way regarding his/her tracer condition by such services as counseling provided at the time of screening.

11. There is no difference in proportion of appointments kept between patients referred for previous conditions not presently acute and those referred for presently acute conditions.

The results of this analysis may suggest specific follow-up emphasis is needed in certain situations.

12. The proportion of appointments kept is not influenced by whether screening clinic personnel conduct follow-up regarding appointment status.



The project team will try to determine whether present followup practices affect appointment-keeping behavior.

 Patient compliance is not influenced by whether screening clinic conducts follow-up on care completed.

The influence of follow-up practices on compliance behavior will be examined.

# C. Hypotheses Regarding Characteristics of the Patient

14a. Adequacy of care is not related to the ethnicity of the patient.

- b. Compliance is not related to the ethnicity of the patient. "ethnicity" = Black, Caucasian, or other
- 15a. Adequacy of care is not related to the ethnic match of patient and provider.
  - b. Compliance is not related to the ethnic match of patient and provider.
    - "ethnic match" = patient and provider are of same or different ethnic backgrounds

Hypothesis 15 will examine whether differences in ethnic back-

ground of patient and provider influence adequacy of care and compliance patterns.

Many of the above hypotheses measure the influence of the independent variables on adequacy of care; prallel hypotheses will also be tested for impact and compliance.



# III. DEVELOPMENT OF METHODOLOGY

# A. Identification and Selection of Tracer Conditions

The identification and selection of tracer conditions is a critical component of the tracer methodology which is being adapted for this project. The tracer method is a procedure whereby adequacy and impact of care are measured for a specific set of conditions, and the results generalized to medical care provided in that setting for patients with similar conditions. Therefore, it is important to select tracer conditions that are representative of medical conditions likely to be found in the EPSDT population.

The identification of candidate tracer conditions began early in Phase I; the selection procedure for the final set of tracers has been developed and implemented. Final selection of the tracer conditions to be used in data collection and analysis will not be made until the Pretest is completed. The identification and selection processes have proceeded by sequential steps, using decision-making criteria developed by David Kessner; the application of the criteria was adapted to suit characteristics of the EPSDT program.

The first step in the tracer selection procedure was to identify a list of possible conditions which could be used as list of conditions was compiled which had a reasonable probability of being found in the EPSDT population by screening. This initial list was developed using the <u>Hospital-International Classification of Diseases</u>, <u>Adapted</u>, Second Edition, and the EPSDT Screening Summary and History forms. EPSDT Quarterly Reports for 1974 contain frequency distributions of referral categories by age and clinic. Since the summaries list



referrals by broad categories, it was only possible to get an approximation of the frequency of referrals for specific tracer conditions, e.g., the referral category genitalia may contain two tracer conditions, phimosis and vaginitis, as well as other diseases.

The final step in identifying candidate tracer conditions was to convert broad descriptive categories into discrete pathological entities. For example, upper respiratory infection was considered as a candidate tracer condition. Since it represents several different etiologies and treatment modalities, for which minimal care cannot be specified, it was divided into specific entities such as tonsillitis, acute pharyngitis and bronchitis. Similarly, dermatitis was divided into eczema, impetigo and seborrhea.

By this procedure, a list of thirty-one candidate tracer conditions was developed. (See Appendix I.) To narrow the list of candidate conditions to those which would be useful as tracers, de---cision making criteria were adapted and applied.

# Application of Kessner's Decision Criteria

Potential tracer conditions were selected by sequentially applying the decision-making criteria to each of the tracer candidates. The decision-making criteria described below were modified from those used by Kessner in his original application of the tracer method.

> A tracer should have a significant <u>functional impact</u>. The EPSDT trogram is designed to screen only for condi-

# E E Γ Γ Γ Γ ſ I п

tions believed to have a functional impact. Therefore, candidate tracers automatically meet this criterion. An exception is sickle cell trait, which may not have a functional impact.

- 2. A tracer should be relatively <u>well defined and easy to</u> <u>diagnose</u>. It is important to select tracers which fulfill this requirement since care is evaluated in comparison to minimal care for a specific condition. Although some conditions such as nutritional deficiency (obesity and malnutrition) may be common in the population and frequently referred, they are inappropriate as tracers because they cannot be defined as clear-cut pathological entities with specific etiologies and treatment requirements. This is also true of conditions such as heart murmurs and vision disorders.
- 3. <u>Prevalence rates</u> should be high enough to permit the collection of adequate data from a limited population sample. Since the population of EPSDT program participants, is finite and narrowly defined, it is important to select tracers which appear frequently enough to yield an adequate population of patients from which to sample. As Kessner points out, and as is explained below in the section on sample size, it is necessary to have a large enough number of cases to test the hypotheses on adequacy and impact of care. To the extent possible, the analysis will control for social and demographic characteris-



tics of the patients, screening clinics and providers. The frequency distributions of referral categories reported in the Michigan Department of Social Services and Department of Public Health EPSDT quarterly reports were used to estimate prevalence rates. Examples of conditions which are of interest but were eliminated because of low frequency are hypertension, tuberculosis and diabetes mellitus.

- 4. <u>Impact of care</u>: The natural history and/or outcome of the condition should vary with utilization and effectiveness of medical care. Tracer conditions are selected which are believed to respond to both the quantity and quality of medical care provided to the patient. It is, therefore, inappropriate to use genetic conditions or terminal illnesses as tracer conditions. For this reason, congenital anomalies such as cleft palate, and "incurable" conditions such as leukemia and malignant neoplasm were not considered as tracer candidates.
- 5. <u>Management criteria</u>: The techniques of medical management of the condition should be well defined. This decision criterion was also of major importance in the tracer selection process. A basic component of the tracer method is the development by health providers of minimal care plans which represent the baseline for what constitutes minimally acceptable adequate care for a given condition. These minimal care plans supply a


means to objectively evaluate adequacy of care. No condition can be a tracer unless it is possible to develop a minimal care plan with which health care providers concur. Conditions such as developmental lag and hyperkinetic reaction were eliminated from the initial list of tracer candidates before minimal care plans were developed, as sufficient controversy exists concerning appropriate treatment.

6. Epidemiology: The effects of non-medical factors on the tracer should be understood--e.g., is the condition more or less prevalent in a given type of patient population such as the EPSDT population and why. Since social, cultural, economic, and behavioral factors may influence the distribution of certain health problems, it is necessary to know what epidemiologic studies have revealed. This will facilitate comparison of morbidity rates found in the study population with those that epidemiologic research suggests should prevail. For example, epidemiologic research suggests that disproportionately high rates of lead poisoning and nutritional deficiency are likely to be found in low income, largely urban populations. This criterion is relevant to the present project because the characteristics of the EPSDT population can be clearly described. During Phase I library research has been conducted, and the epidemiologic characteristics associated with each of the tracer



candidates have been compiled. This information will be compared with the present study's findings when data collection and analysis are completed.

## Development of the Process Chart

By the sequential application of these decision criteria, the initial list of tracer candidates was narrowed to 18, and then to 12. (See Appendix I.) A process chart of activities associated with the provision of health services was developed. These activities provided a framework for structuring the minimal care plans, i.e., 1) evaluation includes history and physical examination, laboratory, x-ray and other diagnostic tests; 2) management includes diagnosis and treatment, counseling, hospitalization, and referral; and 3) follow-up. Each of the candidate tracer conditions was charted in an attempt to identify which of the processes would be "highlighted" by each tracer: (See Appendix I.) Some processes will be more important in diagnosing and managing certain tracer conditions than in others. For example, an adequate history and physical examination are crucial to the diagnosis and treatment of tracers such as otitis media and asthma, whereas, these are less important than laboratory findings in iron deficiency anemia. Similarly, some conditions will rarely require hospitalization, while others, such as acute lead poisoning and circumcision for phimosis are likely to require hospitalization. It is important to select tracers so that all processes are represented in sufficient numbers to make statistically significant statements regarding adequacy of various components



of care. The process chart was invaluable in indicating which tracers should be retained, and which could be eliminated.

In applying the two major selection procedures --Kessner's decision-making criteria and the process chart--the list of candidate tracers was narrowed to 12. Appendix I gives a list of all the tracer candidates and designates the reasons for keeping or eliminating each. Minimal care plans were formulated for these 12.

The final selection of tracers awaits the results of frequency data from the MDSS Data System for the second, third and fourth quarters of 1974 and results of the Pretest. There have been unpredictable delays in the receipt and compilation of MDSS screening, referral, and billing information on the EPSDT program. First quarter 1974, data became available the first week in February. Pretest activities are scheduled to begin February 24, 1975. Twelve tracers will be used in the Pretest in order to assess the utility of the data collection forms. Following the Pretest, up to 6 tracers will be dropped, depending on frequencies and feasibility of data collection.



### B. Development and Provider Review of Minimal Care Plans

Standard criteria are necessary in order to assess the adequacy and impact of diagnosis, treatment, and follow-up care on an ongoing basis. This project has designed minimal care plans which will be used as standards to evaluate care provided following referral from the EPSDT program.

The minimal care plan for each tracer consists of a set of medical procedures that constitute the minimum protocol essential for adequate and appropriate care. Given the delivery of minimum care, certain changes in the condition (outcomes) are expected; estimates of these have been included in the plans.

The development of the minimal care plans has been a long and exacting task, consisting of five stages. In the initial stage, members of the project staff formulated comprehensive lists of all those items of care applicable to the diagnosis and treatment of the tracer conditions. This was done through review of standard pediatric text books, reliance on experience gained through clinical practice, and consultation with experts in relevant specialties. These minimal care plans includeda description of necessary procedures for (1) evaluation including history, physical examination and diagnostic tests, (2) management including diagnosis, treatment, counseling, hospitalization and referral, and (3) follow-up. They also included outcomes expected within designated time periods (see Appendix II for sample).



The purpose of this project is to develop a mechanism for evaluation which reflects community standards of minimal care that are practical and feasable rather than ideal academic standards. Thus in the second stage Ruben Meyer compiled lists of specialists appropriate to each of the tracer conditions, and of community-based, practicing pediatricians (known as community providers) (See Appendix III). Practicing pediatricians were selected from Ann Arbor to represent providers who practice near a university medical complex; and from Detroit to represent providers who practice in the inner city or in the suburbs of a large metropolitan area. No attempt was made to achieve a random sample of specialists and community providers.

Some comment must be made about the response of the providers to Dr. Meyer's request for their cooperation. Both specialists and primary care providers were interested in the project and eager to learn more about the EPSDT system. All providers contacted agreed to participate.

The third phase was to convert the minimal care plans to what became known as "minimal care check lists" for review by specialist and primary care providers. (see Appendix IV for sample). Providers were instructed to complete them separately and independently with no knowledge of the judgments and opinions of the others.

Providers were asked to rate each item on the checklists as: (1) essential; (2) non-essential but recommended and (3) not recommended. Since data will be collected by a retrospective review of medical records,

Γ

Ľ

L

it was important to obtain from providers an indication of whether these items would be recorded on the record. The U of M study team was concerned about the validity of the record abstracting as a data collection method and physician belief that an item might be done but not recorded. Therefore, the checklists were structured so that each checkmark would simultaneously specify an item's essentiality to minimal care and its likelihood of appearing on the record. Space was left for additional items and comments or qualifiers. Thus, while the form was standardized, it was also open-ended. All additions were to be rated by the above method, and quantitative values such as dosage levels or time periods for expected outcomes were to be designated. Finally, where applicable, providers were asked who should administer the care by indicating <u>p</u> for primary care provider, and <u>s</u> for specialist with the type of specialist designated.

Minimal care checklists were mailed to five specialists for each tracer condition for review and comment. This provided input from individuals with expert knowledge and experience in treating each of the tracer conditions. In addition, checklists for <u>all</u> of the tracer conditions were mailed to ten community-based pediatricians. This provided input regarding treatment of a tracer condition in actual practice.

The fourth stage was, of course, to tally the responses to the checklists. Specialist responses were tallied separately from the "community provider" responses for later discussion. To indicate

Γ E [ [

consensus for the discussion no more than two providers could disagree with the majority.

Some observations by The U of M study team are worth noting. Regarding whether an item would be recorded on the record, provider responses reflected an almost unanimous opinion that if an item is essential, it must be recorded. With this mandate, the study team feels more confident about recording an item as not done if it does not appear on an individual's medical record. Another observation about the checklists is that frequently there was agreement regarding the essentiality of individual items.

In the fifth stage, the tallied responses were submitted to two community provider panels for review and determination of minimal care criteria. Discussion papers, with consensus items indicated, and modifications in criteria and/or additional criteria suggested were submitted to the panels (Appendix V). The panels were asked to review the responses by general pediatricians as well as specialists. Each panel was to come to a consensus regarding essential, recommended and contraindicated items for minimally acceptable medical care in community practice. This included specifying quantitative parameters for all time periods, and all laboratory and prescription values, and indicating type of provider recommended to administer care.

One rather surprising element was that the panels frequently disagreed with the mail responses and eliminated items which had been



deemed essential. This was because emphasis was placed on minimal acceptable care. Thus, the resultant plans are probably extreme in this regard. Items above the minimal will be retained and weighted to get some idea of the range of care on a continuum above minimal. Through this procedure, it is hoped that pragmatic guidelines have been established to evaluate the quality of care EPSDT participants receive as a result of screening referrals.

Development and review of minimal care plans took much longer than anticipated. Drafting of initial minimal care plans, conversion to checklist format, and compilation of all responses for discussion entailed a total of some nineteen drafts in five different formats and required two months to complete. Another major time factor was the lead time necessary to convene the two community provider panels.

The review and comment process was surprisingly long; it took each panel about one hour to review one minimal care plan. When this review process was originally scheduled to be finished, less than half of the plans had been reviewed by each group. It became clear that the U of M study group had set impossible expectations. After some discussion with the MDSS Project Director, it was decided that it would be preferable to have <u>all</u> community providers review <u>all</u> minimal care plans, in order to insure maximum validity. A total of nine meetings was held between December 10 and February 2nd. Despite the unexpected time required for the review process all participants were excited by the free exchange of ideas which took place and thanked Dr. Meyer for the opportunity for such discussions.



### C. Design of Abstract Forms

Data collection will be conducted using precoded abstract forms. Separate forms have been prepared for each of three sources of data: 1) screening clinic records; 2) medical records; and 3) patient/parent interviews. It was originally anticipated that collection of information from MDSS billing records would be necessary, however, most of this information will be obtained from medical records and the merged tape (described later). Therefore, it will be unnecessary to abstract billing invoices.

Development of the abstracting forms has involved a lengthy review process by the study team. Two issues have been dealt with in repeated revisions: likely sources of information, and duplication. It has been necessary to determine what information is required and what is its most likely and reliable source. Clinic administrators and screening nurses have been helpful in describing the location and level of detail of information available in screening records. Pretest activities will show the level and detail of information which can be expected from medical records and parent/patient interviews.

The issue of duplication is two-edged: duplication has been minimized, except where it was thought to be useful and necessary. An example of informative duplication is to collect information on follow-up and impact in patient/parent interviews, supplemented by provider records.

Samples of the three abstract forms are appended (See Appendix



VI). The abstract form for the screening clinic record includes detailed demographic data, reasons for referral, and place referred. It is constructed to follow the decision rules for appropriate study group assignment and thus will simplify sorting patients into proper categories. Access to the screening clinic records has been provided for through Public Act 39 as described later (Section V-A).

Abstracting the patient medical record will include identifying information, and specific items from the minimal care plans on the process and outcome of care. Access to patient medical records will be gained via patient/parent informed consent, and cooperation of the physician. These abstract forms are likely to undergo the most extensive revision as a result of the Pretest.

The patient interview form will contain information on: patterns of referral; patterns of appointment-keeping; the process of care; whether directions were followed; what sort of follow-up was done; and what general or specific impact occurred. Access to patients will follow informed consent procedures, interviews will be conducted over the phone if possible and if not, by a personal visit by a trained interviewer.

All forms are precoded, and have been designed to be administered by trained nonmedical abstractors. They are sufficiently detailed and structured to minimize abstractor bias. In order to maintain confidentiality, abstract forms will be number coded. Identifying names and I.D. numbers will be maintained separately.



# D. Preliminary Plans for Analysis

There are many methods of examining whether adequacy of care varies significantly with specific independent variables such as those discussed in Section II. The most basic method is a simple discrete two-dimensional ordering; i.e., care is adequate (all criteria judged essential to minimum care have been accounted for) or it is not adequate (essential criteria are lacking).

A second approach would be to use two scores: one score which would indicate what percentage of all essential items have been accounted for, and a second score which would assign point values to those items found in the record. For example, +3 would be assigned for each essential item accounted for, +1 for each recommended item, and -3 for each non-recommended item.

Yet a third approach, and one which would enable the application of statistical tests of strength of relationship, would be to construct a minimal care continuum where criteria are weighted by means of a Thurston-type scale. All criteria which received a rating of essential from every provider on the minimal care check-lists would be weighted 1.00. Criteria which received ratings of essential from some percentage over 50% of providers would be weighted accordingly. Any item with less than 50% of the providers rating it as essential would be eliminated. A scale ranging from below minimal to optimal would thus exist along which each treatment episode could be ranked. A necessary condition for ranking above minimal would be that every procedure designated as essential by the provider panels was performed. Treatment episodes which do not meet this condition



may be assigned to an aggregate category below minimal.

Certain problems of measurement are foreseen such as the possibility that separate conditions may exist for one treatment episode. For instance, a client with iron deficiency anemia may also have an infection, thus influencing treatment. There may also be inconsistent scores between subsets of items for one care episode, e.g., the physical examination may be adequate and treatment inadequate. Until Pretest data are obtained, assessment of these problems cannot be made, and solutions can only remain hypothetical.

Methods of examining variations in impact of care have not yet been formulated, because impact measures have depended on outcomes designated in the minimal care plans. Other measures being considered include changes in activity level, changes in symptom level, and frequency of recurrent episodes. Data for these parameters will be obtained from parent/patient interviews.

All of the above methods of analysis are being considered. Certainly, unpredictable data constraints will influence the statistical tests used. It is possible that all methods of measurement will be used in accordance with the nature of the different variables.

### IV. STUDY POPULATION

## A. Definition of the Study Population

The definition and selection of the study population have been central topics in project methodology discussions. It was necessary to define a specific subset of the population of EPSDT participants for whom care will be evaluated and to specify the common characteristics of that population. Similarly, it was necessary to identify what "list" of the population will be used to draw a group of patients to be included in the study. These activities raised several problems. Following is a summary of the substantive methodology problems associated with generating lists of participants, and a description of the decision rules for their assignment to appropriate study subgroups.

In the initial proposal it was anticipated that sampling would be conducted at selected screening clinics by quota sampling from records those persons referred for one of the tracer conditions. Some of the people selected would be lost due to their refusal to participate and some eliminated due to false positives (those who were referred for suspicion of a tracer condition who subsequently were diagnosed as not having the condition). The expected attrition rate was estimated to be about 30%. Early in Phase I, The U of M study team was informed that the MDSS Data System planned to construct a tape from its files which would match all persons referred from EPSDT, by I.D. number, to bills for treatment received and paid on their behalf. This became known as the "merged tape." The tape would include all persons referred in the first quarter of 1974 for whom bills were received by the end of June, 1974 (120 days after



the last screening date in the first quarter). Since bills received for treatment of referred persons indicate a diagnostic category, choosing a study population from this tape would eliminate the problem of false positives. In other words, the study group would be chosen from a list of persons actually diagnosed as having a tracer condition. It was therefore decided to rely on the merged tape for generating lists of patients for the study and for more precise frequency distributions of referrals by tracer category. This latter information would be used in the final selection of clinics and tracers.

Accordingly, these data requirements were outlined to MDSS Data Systems personnel and arrangements were made to get a printout of the merged tape as soon as it became available. Although the staff of the MDSS Data Systems Department was extremely helpful and cooperative in attempting to provide for the project's data needs, unavoidable delays occurred in preparing the printouts and tapes.

In December 1974, The U of M study team received a printout of the merged tape, covering all referrals during the first quarter, 1974 for which a bill for services had been submitted. It included all clinics in Michigan, but did not give frequency distributions. Rough hand calculations were done to get an idea of the number of referrals and diagnoses which corresponded to the tracer conditions. Two problems immediately became apparent: 1) for some of the 12 tracer conditions, the number of persons referred and diagnosed was surprisingly low--too low to draw an adequate sample; 2) this was partly because only 40% of the persons referred were matched with bills processed. For these reasons, it was necessary to consider enlarging the

population to cover more than six clinics and/or to cover a longer time period than one quarter.

The merged tape printout was helpful because it supplied detailed referral and diagnostic data for a portion of the EPSDT population. The chief limitation of the tape, for this project, was the low proportion of referred persons for whom bills were actually submitted and processed within the 120 day deadline. Also, since the merged tape contains only persons for whom billing invoices were submitted, referrals to public agencies which do not bill MDSS are automatically excluded. Because of these limitations, the methodology was revised back to depending on screening records in the clinics for obtaining a study population.

In order to determine which clinics had large enough numbers of referrals, it was necessary to obtain frequency distributions of patients by referral category for all the clinics in Southeast Michigan. In order to locate screening records, it was necessary to get lists of patients referred, within a referral category by clinic. These data are available on the EPSDT Screening Summary tape. Arrangements were made to obtain a copy of the screening tape for the lst quarter of 1974, and sufficient information has been generated to begin the Pretest.

During efforts to secure these data, and in preparation for their use, a method was devised for study group selection and allocation into discrete subgroups. Lists of persons by clinic and by I.D. number will be generated from the screening referral tapes. Since these



lists are drawn from screening referrals, a variety of outcomes are possible after referral. For example, a person referred for "ear" may or may not have been referred for otitis media; may or may not show up for the referral appointment; may or may not go to the provider suggested by the screening clinic; and may or may not have a positive diagnosis of otitis media. In order for individuals to be included in the groups to be studied, they must fulfill the following criteria: 1) referred for a definite suspicion of a tracer condition; 2) kept referral appointment with a provider (not necessarily the clinic's choice); and 3) diagnosed as having a tracer condition.

The U of M study team was concerned about the bias of evaluating diagnostic procedures only on a group of patients with positive diagnoses. To compensate for this, it was decided that a second, subgroup of persons would be studied, who meet criteria 1 and 2 above, but are diagnosed as not having a tracer condition. For this subgroup, only diagnostic procedures will be evaluated, to determine adequacy or inadequacy.

An elaborate decision-making model has been designed, to determine whether persons referred meet the criteria for one or the other of these study groups. The sources of information which will be used are: 1) the screening summary form, 2) the EPSDT Clinic referral form, 3) the provider diagnostic return form, 4) nurse follow-up notes which may appear on the referral form or elsewhere in the clinic record, 5) the merged tape billing information, and 6) the providers' medical records. These sources will be used sequentially in the decision procedure, based on a set of decision rules which cover all



possible outcomes after a person has been referred. See Appendix VII for a detailed chart of the decision procedure.

While it was intended that each of the study group lists generated would be sampled, it is now anticipated that it will be necessary to include all persons who meet either set of criteria, in order to get an adequate number of cases. Terming either the study group or the negative diagnosis subgroup a sample then is not accurate. Sampling instead will take place by randomly sampling clinics from those which are demographically similar. The number of clinics then becomes a function of the number of people necessary to test the hypotheses. In the clinics sampled all persons who meet either set of criteria will be included in the study.



### B. Size of the Study Population

The size of the study population will be determined by calculating the number of cases necessary to adequately test each of the hypotheses described in Section II. However, it should be noted that there are two estimation problems which relate to all of the hypotheses to be tested. Specifically, for patients who receive care after referral from an EPSDT clinic, estimations must be made of 1) the proportion of patients who receive adequate care; and 2) the proportion of patients for whom care had a measurable impact. Therefore, any discussion of the size of the study population must also consider the number of cases necessary to estimate these proportions within a prescribed degree of precision.

To determine the sample size requirements for a specific hypothesis in the form presented, one must state:

- The difference in population proportions that would be important to detect;
- Approximately what proportion of patients receive adequate care (or for whom care had a measurable impact);
- Acceptable level of probability for drawing the conclusion that there is a difference in proportions when there is truly no difference;
- Acceptable level of probability for drawing the conclusion that there is no difference in proportions when there is truly an important difference.


By the definition of both "adequacy" and "impact" it is anticipated that the proportion of patients with adequate care and the proportion of patients for whom care had a measurable impact will be approximately 70%. Although for some analyses adequacy and impact may be measured on a detailed ordinal scale, typically a dichotomous scale will be used for each. The probability of concluding that there is a difference in proportions when there is truly no difference ( $\checkmark$ ) will be set equal to 0.05. The probability of concluding that there is no difference in proportions when there is truly an important difference ( $\beta$ ) will be set equal to 0.20.

Let us now examine several specific hypotheses and state just what differences would be important to detect.

 H<sub>o</sub>: there is no relationship between adequacy of careand whether care is provided by the same organization that conducted the screening.

If differences as large as those indicated in Table 1 truly existed for this population recommendations for modifications in the EPSDT program would be considered warranted.

#### TABLE 1

Important Differences in Proportions All Tracers - All Clinics

	ADEQU		
CARE	YES	NO	TOTAL
Same Organization	80%	20%	100%
Another Organization	60%	40%	100%

One should note two important aspects of Table 1. First, all tracers and all clinics in this study have been combined for this analysis.



Although it is conceivable, for example, that organizational differences may be more pronounced for some tracers than others, we are interested in determining the sample size necessary to examine only the "overall" effect and not tracer-specific differences. This general approach of considering only overall effects will be used throughout this discussion of sample size. Second, a test of the hypothesis implied by Table 1 is simply a test of the equality of proportions from each of two binomial populations. Moreover, since the alternative hypothesis of interest is that the proportion of patients receiving adequate care when care is provided by another organization is less than the proportion of patients receiving adequate care when care is provided by the same organization, a one-sided test will be calculated.

By routine calculations or by examining such tables as those provided by Cochran and Cox (1957, p. 24), it is easily determined that a study including 63 patients receiving care from the same organization and 63 patients receiving care from another organization would provide sufficient data to test adequately the hypothesis outline above.

2. H: There is no relationship between adequacy of care and whether the patient has previously received care from the same provider.

If differences as large as those indicated in Table 2 truly existed for this population, recommendations for modifications in the EPSDT program would be considered warranted.



#### TABLE 2

# Important Differences in Proportions All Tracers - All Clinics

PREVIOUS CARE ADEQUACY OF CARE YES NO TOTAL Same Provider 75% 25% 100% Different Provider 65% 35% 100%

Again, it is conceivable that differences in this dimension may be confounded with differences in types of provider. That is, the proportion of specialists among providers who are seeing patients for the first time may be greater than the proportion of specialists among providers who have seen the patient before. Such confounding variables will not influence sample size calculations. A study including 260 patients who have previously received care from the same provider and 260 patients who have not previously received care from the same provider would provide sufficient data to test adequately this hypothesis. One should note that in order to obtain 520 patients meeting these criteria, it will be necessary to include in the study more than 520 patients since it is unlikely that 50% of the patients in this population will have previously received care from the same provider.

8. H<sub>o</sub>: Adequacy of care is not influenced by whether the initial clinic referral is to a primary care provider or to a specialist.
In order to investigate meaningfully this hypothesis, tracers will have to be classified into two groups based on whether the minimal

e bath nitin

care plan recommends that the initial



referral be to a primary care provider or to a specialist. If differences as large as those indicated in Table 3 truly existed for this population, recommendations for modifications in the EPSDT program would be considered warranted.

#### TABLE 3

# Important Differences in Proportions All Clinics

MINIMAL CARE PLAN RECOMMENDS INITIAL REFERRAL TO PRIMARY CARE PROVIDER

ACTUAL INITIAL	ADEQUACY OF CARE			
REFERRAL	YES	NO	TOTAL	
Primary Care	75%	25%	100%	
Specialist	65%	35%	100%	
-1				

MINIMAL CARE PLAN RECOMMENDS INITIAL REFERRAL TO SPECIALIST

ACTUAL INITIAL	ADEQUACY OF CARE			
REFERRAL	YES	NO	TOTAL	
Primary Care	65%	35%	100% -	
Specialist	75%	25%	100%	

A study including 260 patients in each of the four groups described in Table 3 would provide sufficient data to adequately test this hypothesis in detail. An extremely important consideration becomes obvious; it may not be possible to obtain enough patients in each of these four groups. Time and cost may be prohibitive to obtain data for the considerably more than 1000 patients that would be required for the total study. There may not even be this many patients in the entire population for selected tracers in a reasonably defined time span.



# D. H: There is a relationship between adequacy of care on and treatment compliance.

If differences as large as those indicated in Table 4 truly existed for this population, recommendation for increased emphasis on treatment compliance would be justified.

#### TABLE 4

## Important Differences in Proportions All Tracers - All Clinics

COMPLIANCE	ADEQUAC	ADEQUACY OF CARE	
	YES	NO	TOTAL
Yes	75%	25%	100%
No	65%	35%	100%

A study including 260 patients who complied with the treatment regimen and 260 patients who did not comply would provide sufficient data to adequately test this hypothesis. It is important to note that this hypothesis and those listed above will also be phrased in terms of impact of care.

Although other hypotheses of interest will be tested in this study, the above calculations are sufficient to indicate the sample size required for the total study. Clearly, more than 500 patients from all clinics and for all tracer conditions will be required. For certain hypotheses, considerably more than 500 will be needed. Hypotheses not explicitly considered above will require reasonable patient samples from selected groups such as rural-urban, Black-Caucasian-other, and PRESCAD-non-PRESCAD. As noted above, a



preliminary examination of the screening summary and merged tapes indicated that there may not be 500 patients (and certainly not 1000 patients) in Southeastern Michigan who were referred and diagnosed for the tracer conditions during the first quarter of 1974.

It is proposed that once a clinic is selected for inclusion in the study, all patients screened in that clinic who satisfy the criteria will be included. The time period to be studied will be the first quarter of 1974; if necessary the second and third quarters may also be used. The crucial decision is now how many clinics should be included. A final decision will depend on frequency distributions of people referred in categories which correspond to tracer conditions. Such an examination is presently underway. For such a sampling scheme, there will be the implicit assumption that study clinics have been randomly chosen and that the study time period has been randomly chosen. A list of eligible clinics that could be included in the study will be proposed. Eligibility will be determined based on location and referral notes for selected conditions. The list will be stratified by rural, urban, PRESCAD, and non-PRESCAD. From the stratified list, the appropriate number of clinics will be selected. It should be noted that the Washtenaw clinic will be included in the study and, hence, will not be included on the above list.

Returning to the two fundamental estimation problems for this study, it should be noted that if 500 patients are included in the total study, it will be possible to estimate with a high degree of confidence the proportion of patients receiving adequate care in this

• ...



population within approximately 4%. This same degree of precision would hold for the proportion of patients for which care had a measurable impact.

.

.

.



#### V. SUPPORT ACTIVITIES

#### A. Administrative Considerations

Concurrently with development of the methodology, a number of administrative tasks have been completed or are in process. These activities generally can be divided into four areas: continuing communication with the MDSS and MDPH; preparation of reports; personnel activities; and preparation for the Pretest in Washtenaw County.

With MDSS as the direct contractor for this project, close liaison is maintained with the project director there, and the designated project coordinator. Meetings are scheduled regularly for advice and consultation. Progress and problems are reported, and methodological alternatives which have implications for the project are discussed and agreed upon.

The Michigan Department of Social Services has been directly involved in two areas of Phase I, supply of data and arrangements for informed consent procedures. While the MDSS has been as cooperative as their data system allows, some problems arose during Phase I. It was initially planned that MDSS would supply The U of M study team with the necessary frequency distributions of referrals, which were needed to select tracers and clinics. Due to the other demands on their data processing system, the delays became intolerable with the project schedule. To save time, The U of M study team requested duplicate computer tapes and generated the necessary data using its own staff and facilities. This took longer than expected, because the MDSS tapes were in a format incompatible with The U of M data processing system. Frequency



distributions and other required information have now been prepared, and will be used in the Pretest.

Procedures for obtaining informed consent from parents and patients to be included in the study were developed by Michigan Department of Social Services, in cooperation with their legal counsel and members of The U of M study team. Every attempt will be made to insure that consent will be voluntary, with no suggestion of coercion.

Initially, lists of patient identification numbers, by referral category, will be generated by The U of M study team, from the screening summary tape. Identification numbers will be transmitted to MDSS and patient names returned to the study team. Patient screening records will be abstracted. Names of persons who fit study population characteristics will then be transmitted to MDSS. MDSS will determine parent/guardian names and addresses, and will mail consent requests immediately. The request will include a brief description of the project, and a formal request from MDSS that the person give permission to study team members to abstract information from their medical record and to conduct an interview. A consent form requiring the respondent's signature will be included, to be returned to the MDSS project director's office. It is anticipated that some addresses may be inaccurate, requiring repeated mailings. If a form is not returned within ten days, a second reminder letter will be sent. For those who do not respond to a second letter, the recipient's address and eligibility will be verified. The service worker will then telephone the parent/ patient and ask that the form be returned.



The Michigan Department of Public Health has not been directly involved in development of the methodology during Phase I. Several people at the state and local levels have been consulted periodically, to ascertain actual clinic procedures, so that abstracting forms for data collection may be structured appropriately.

An important development for facilitating the smooth operation of the project is the declaration of this study, by the Director of MDPH, as priority research project, under Michigan Public Act #39. (See Appendix VIII). This status accomplishes two things: The U of M project takes priority over all other research or evaluation projects in a clinic; and all screening clinic records are formally open to members of the study team, with their assurance of confidentiality. This access will enable decisions on sampling to occur at the time screening records are abstracted before obtaining informed consent from people who will not ultimately be in the study.

A joint meeting was held between MDSS, MDPH and The U of M study team on February 5, 1975. The objective was to review the background of the project and to inform participating staff persons of activities and progress during Phase I. (See appended list of participants). The support activities required of each agency were discussed, to apprise participants of how their assistance fits into the overall project. Dr. R. Gerald Rice, Director of the Bureau of Maternal and Child Health, and Dr. Thomas Kirk, a physician on his staff, will work with Dr. Meyer in contacting the physician provider organizations in the communities where clinics have been selected. In addition, The U of M study team will work with Avis Dykstra, Nurse Coordinator for

EPSDT, and Anne Rossi, EPSDT Coordinator, both of the Michigan Bureau of Maternal and Child Health, in arranging contacts with nurse administrators of the clinics to be included in the study.

Other organizations have contacted The U of M study team either with questions on Michigan's EPSDT system in general, or specifically asking about the tracer evaluation project. Information is exchanged periodically with the Texas research group, Regional Health Services Research Institute. Dr. Meyer is involved in another project, which is developing EPSDT training materials for social service workers. There is increasing interchange of ideas, references and resources, and an invitation has been extended to help plan and participate in a series of national workshops on EPSDT sponsored by the School of Social Work.

During the eight months of project funding The U of M study team has submitted three formal documents, through MDSS, to the Federal sponsors, Social and Rehabilitation Service. Initially, preparation and submission of a detailed workplan for Phase I was required. It was useful in operationalizing and sequencing plans for the first phase of the project. A quarterly progress report was submitted November 1, 1974. The present Phase I report describes all activities during the first eight monts of the project. It has been written concurrently with preparations for the Pretest. The process of preparing the report has served to draw together many separate and complex decision-making processes.

The workplan and the final Phase I report have served useful



purposes; the utility of the quarterly report is less clear. Staff time expended might have been spent more productively on development of methodology and data collection procedures.

### B. Personnel

During Phase I the personnel structure for the project has undergone significant changes due to the unsuccessful efforts to recruit an experienced program evaluator. Several able and experienced people have been hired. Project management has remained the responsibility of the Principal Investigator, Beverly J. Lingle. The U of M study team currently includes:

> Ruben Meyer, M.D., M.P.H., Project Director. (20%)\* Dr. Meyer actively participates in all methodological discussions; consults with physicians and maintains a continuing relationship with officials in the state agencies.

Beverly J. Lingle, M.A., Principal Investigator. (100%) Ms. Lingle participates in methodological discussions; is in continuous communication with MDSS and MDPH facilitating information exchange; meets with project consultant panels; and is responsible for the ongoing administration of the project.

Joanne Reuss, M.P.H., Project Associate. (100%) Ms. Reuss

\*Proportion of appointment formally committed to this project.



was hired fulltime January 6, 1975; before that she had been employed parttime, while a student. Ms. Reuss participates in methodological discussions; applies decisions to ongoing study design; and will be primarily responsible for coordinating Pretest and field activities.

Marianne Fahs, M.P.H., Project Assistant. (100%) Ms. Fahs joined the project staff in October 1974. She participates in methodological discussions; designs abstract and interview forms; and will collect data in the field.

O. Lynn Deniston, M.P.H., Project Associate. (10%) Participates in ongoing research design and methodology development, and will be involved in data analysis and reporting.

George Williams, Ph.D., Project Associate. (10%) Participates in methodological discussions; and provides necessary biostatistical consultation.

Sandy Snedecor, B.A., Ms. Snedecor has been employed on an hourly basis beginning December 1974, by arrangement with the School of Public Health Department of Biostatistics. Sits in on selected methodological discussions, and prepares all computer programs and software necessary for data processing and analysis.

Winnie Willis, R.N., M.A., Project Associate. (20%) Consults with project staff regarding medical standards, and develop-



ment of minimal care plans.

Victor R. Stoeffler, M.S.W., Project Associate. (10%) Contributes to the project regarding certain tracers, on aspects of minimal care, and regarding functioning of the local social service system.

A search sommittee is still functioning, seeking to fill the position of Co-Principal Investigator.

A consultation group consisting of persons familiar with the tracer method was formed early in Phase I. Avedis Donabedian, Rashid Bashshur, and O. Lynn Deniston all agreed to serve as consultants to the project. Mr. Deniston has served as a regularly participating member of the study team. Dr. Bashshur has met with the staff during Phase I, and provided information on methodological procedures and theoretical considerations in the tracer method. Dr. Donabedian has provided informal input.

Dr. Beverly Payne has extensive experience working with similar evaluation models. Although, Dr. Payne was unable to serve as a formal consultant, his staff agreed to exchange information and consult with The U of M study team.

.

E.

-

#### C. Pretest Arrangements

The Washtenaw County EPSDT clinic was designated as the Pretest site in the original proposal, because of its geographic proximity to The U of M, and because of the likelihood of cooperation of the surrounding medical community. The U of M study team has visited the clinic several times, to learn more about its actual functioning, record storage, and the amount of information on individual records. The visits have proved helpful in apprising the study team of the standardized functioning of EPSDT clinics, including screening processes, and records kept on each patient. The Washtenaw clinic has certain features which may differ from other clinics: 1) their record storage system is alphabetical; 2) follow-up is conducted by the clinic screening nurse, rather than an MDSS service worker; 3) the level of training of the staff is above the minimal requirements; and 4) number of incomplete records is very small. The Pretest in the Washtenaw County Clinic will test the applicability of the decision procedure for defining the study population, the feasibility of. consent procedures and the methods of data collection. It is realized that actual data collection procedures may differ between Washtenaw County and other clinic sites. It is believed that these differences are predictable and surmountable, and will not require moving the Pretest to another clinic.

In a series of meetings, administrative arrangements have been made for the Pretest. The U of M study group has met several times with Mary Whiting, the Washtenaw County Clinic Nurse Administrator. At these meetings general procedures for the Pretest were outlined, and arrangements made for abstractors to work with clinic records.



At Mrs. Whiting's invitation, Dr. Meyer and Ms. Reuss met with the Washtenaw County EPSDT Clinic Advisory Council which is made up of both professionals and consumers. The tracer evaluation project was explained and the involvement of the Washtenaw Clinic described. It is anticipated that this type of meeting will be incorporated into the contacts with all clinics.

Regarding access to medical records for the Pretest, two activities are required: securing informed consent from the patients/ parents selected for the study; and soliciting provider cooperation. Consent procedures described earlier will be initiated by MDSS as soon as abstracting begins in the clinics. Dr. Meyer met with the Executive Officers of the Washtenaw County Medical Society, including the chairperson of the Child Health Committee, and the President of the Washtenaw County Osteopathic Society. The officers were very interested in the project and promised their assistance. They further suggested a presentation to a medical society meeting, and submission of a brief article to their society bulletin. The Pretest is scheduled to begin February 24, 1975.



#### Appendix I

#### Selection of Tracer Condition Candidates

Conditions known to be associated with persons in the EPSDT population which were mentioned but not ever seriously considered as appropriate tracers were:

Tuberculosis Venereal Disease Malignant Neoplasms Leukemia Diabetes Mellitus Mental Retardation Epilipsy Rheumatic Fever (Rheumatic Heart Disease) Congenital Anomalies (e.g. Cleft Lip and Palate)

Conditions which were seriously considered as candidate tracer conditions but were eliminated by application of the decision-making criteria:

Proteinuria (albuminuria) - not a discrete pathological entity.

Hypertension - not sufficiently prevalent; not screened for.

Unspecified Hearing Loss - not a discrete pathological entity (combined with otitis media).

Vision disorders - not a discrete pathological entity.

Sickle Cell Anemia - controversy over what constitutes appropriate medical management.

Bronchitis - not sufficiently prevalent.

Acute pharyngitis - not sufficiently prevalent.

Nutritional deficiency (obesity, malnutrition, avitaminosis) - no specific etiology and not a discrete pathological entity; controversy over what constitutes appropriate medical management.

Impetigo - not sufficiently prevalent.

Seborrhea - not sufficiently prevalent.

Development lag - controversy over what constitutes appropriate medical . management.



Heart murmur - not a discrete pathological entity; no specific etiology; not possible to determine appropriate medical management; epidemiologic information unavailable.

Hyperkinetic reaction - not sufficiently prevalent; controversy over what constitutes appropriate medical management.

Child Abuse - no specific etiology; not screened for; controversy over what constitutes appropriate medical management; not a discrete pathological entity.

Dental caries - not systematically screened for; not appropriate in physician-oriented evaluation of medical care.

Eye infections - not sufficiently prevalent.

Urinary Tract Infection (bacteriuria) - not screened for; not sufficiently prevalent.

Tracer conditions still under consideration at conclusion of Phase I:

Iron Deficiency Anemia Otitis Media and Associated Hearing Loss Lead Poisoning Asthma Sickle Cell Trait Tonsillitis Strabismus Eczema Umbilical Hernia Phimosis Vaginitis Enuresis A-2


### Appendix II

#### Asthma

### Minimal Care Plan

#### Evaluation

- A. History
  - 1. Family history of allergies
  - 2. Personal
  - 3. Previous attacks of asthma
  - 4. Previous or associated occurrence of upper respriatory infection
  - 5. Exposure to allergens:

inhalants (e.g. house dust, feathers, pollen) foods

- Presenting or associated symptoms: paroxysmal coughing with possible vomiting
  - abdominal pain
  - generalized itching
- B. Physical Examination
  - 1. Repiratory distress or dyspnea
    - a. wheezing
    - b. sibilant rales
  - 2. prominent accessory muscles of respiration
  - 3. Retraction of suprasteinal notch
  - Chest held high and remains in relatively fixed position (barrel-chested)
- C. Diagnostic Tests
  - 1. Chest X-ray

#### Diagnosis

Asthma, based on

- 1. Characteristic history
- 2. Characteristic physical examination
- 3. Use X-ray to:
  - a. rule out other pathologies (e.g. foreign bodies, fibrocystic disease, bronchiactisis)
  - b. check for complications (e.g. pneumonia, atelectasis)



Minimal Care Plan

A-4

#### Management

- A. Treatment for acute asthmatic attack
  - 1. Bronchodilators
    - a. Epinephrine
    - b. Isoproterenol
  - 2. Corticosteriods
  - 3. Expectorants (e.g. K.I.)
  - 4. Antibiotics if infection is present
  - 5. Hospitalization
    - a. Axygen
    - b. Teachyotomy
    - c. Teachyostomy
  - 6. Parent/patient education
- B. Treatment for chronic or recurrent asthma
  - 1. Environmental controls (e.g. diet, climate)
  - 2. Hyposensitization
  - 3. Medication
    - a. Theophylline
    - b. Corticosteroids
    - c. Other
  - 4. Parent/patient education

## C. Follow-Up

- 1. Planned program
- 2. Continous monitoring

#### D. Referral

- 1. Allergist
- 2. Psychologic support
- 3. Social worker
- 4. Hospital
- 5. Surgical referral:
  - a. Thorasic surgeon
  - b. Otolaryngologist

#### Expected Outcome

Stabilization of condition, measured by fewer acute episodes, or disability days (absence from school/work, or days restricted to the home.) per month.



# Appendix III-A

## Community Providers - Pediatricians

## Name

## <u>City</u>

1.	Stephen Blackman, M.D.	-	Ann Arbor, Michigan
2.	Sheldon Brenner, M.D.	-	Farmington, Michigan
3.	Daniel Chapman, M.D.	-	Ann Arbor, Michigan
4.	Robert Chesky, M.D.	-	Ann Arbor, Michig <mark>an</mark>
5.	James Collins, M.D.	-	Detroit, Michigan
6.	Edwards Curtis, M.D.	-	Ann Arbor, Michigan
7.	John Gall, M.D.	-	Ann Arbor, Michigan
8.	Irving Miller, M.D.	-	Farmington, Michigan
9.	Carl Stillwater, M.D.	-	Farmington, Michigan
10.	Arthur Thompson, M.D.	-	Detroit, Michigan



#### Appendix III-B

#### Specialist Providers

#### Name

Regine Aronow, M.D. Director Poison Control Center Children's Hospital of Michigan Detroit, Michigan

Joseph Baublis, M.D. Associate Professor Pediatrics and Communicable Diseases University of Michigan Medical Center Ann Arbor, Michigan

Gary Bergman, M.D. Southfield, Michigan

Ned Chalat, M.D. Adjunct Professor Otolaryngology Detroit General Hospital Detroit, Michigan

Flossie Cohen, M.D. Professor Pediatrics Children's Hospital of Michigan Detroit, Michigan

Arnold Coran, M.D. Pediatric Surgeon Mott Children's Hospital University of Michigan Medical Center Ann Arbor, Michigan

David Dickinson, M.D. Professor, Chief of Clinical Affairs, and Acting Director University of Michigan Medical Center Ann Arbor, Michigan Specialty

Poison Control

### Infectious Disease in Children

Ophthalmology

#### Otolaryngology

#### Pediatric Hematology

#### Pediatric Surgery

Respiratory Disease

Respiratory Diseas in Childr**en** 

A-6



#### Name

Howard Dubin, M.D. Associate Professor Dermatology University of Michigan Medical Center Ann Arbor, Michigan

Joseph Fischhoff, M.D. Professor Psychiatry and Pediatrics Children's Hospital of Michigan Detroit, Michigan

Lawrence Flieschmann, M.D. Director Renal Dialysis Children's Hospital of Michigan Detroit, Michigan

Robert Gans, M.D. Southfield, Michigan

Conrad Giles, M.D. Southfield, Michigan

Robert Gregg, M.D. Associate Professor Pediatrics Children's Hospital of Michigan Detroit, Michigan

John Greken, M.D. Southfield, Michigan

Jack Hertzler, M.D. Associate Professor Detroit General Hospital Detroit, Michigan

Ruth Heyn, M.D. Professor of Pediatrics and Communicable Diseases University of Michigan Medical Center Ann Arbor, Michigan Specialty

Dermatology

Child Psychiatry

.

#### Pediatric Nephrology

Ophthalmology

Ophthalmology

Respiratory Disease in Children

Dermatology

Pediatric Surgery

Pediatric Hematology



#### Name

Robert Kelch, M.D. Assistant Professor of Pediatrics and Communicable Disease University of Michigan Medical Center Ann Arbor, Michigan

Leonard Lerner, M.D. Southfield Michigan

Jeanne Lusher, M.D. Director Department of Hematology Children's Hospital of Michigan and Associate Professor of Pediatrics Wayne State University School of Medicine Detroit, Michigan

Kenneth Mathews, M.D. Professor Internal Medicine University of Michigan Medical Center Ann Arbor, Michigan

George Nolan, M.D. Assistant Professor Obstetrics & Gynecology Holden Perinatal Intensive Care Unit University of Michigan Medical Center Ann Arbor, Michigan

Patricia O'Connor, M.D. Associate Professor of Pediatrics and Communicable Diseases and Director of Pediatrics Outpatient Clinic University of Michigan Medical Center Ann Arbor, Michigan

William Oliver, M.D. Professor and Chairman Pediatrics and Communicable Diseases Mott Hospital University of Michigan Medical Center

### Specialty

### Pediatric Nephrology

#### Ophthalmology

#### Pediatric Hematology

#### Obstetrics & Gynecology

#### Pediatrics

### Pediatric Nephrology



Name		Specialty
Leslie Pensler, Research Assista Associate Prof Psychiatry Children's Hospi Detroit, Michiga	M.D. ant and Sessor Ital of Michigan an	Pediatrics
Alan Perlmutter, Professor Urology Children's Hospi Detroit, Michiga	, M.D. Ital of Michigan an	Pediatric Urology
Juluis Rutzky Adjunct Professo Pathology William Beaumont Royal Oak, Michi	or Hospital gan	Pediatric Hematology
Roy Schmickel, M Associate Profes and Communicat Holden Perinatal University of Mi Ann Arbor, Michi	A.D. soor of Pediatrics ble Diseases Intensive Care Unit chigan Medical Center gan	Pediatric Genetics
Jan Schneider, M Professor and Ch of Obstetric S Holden Perinatal University of Mi	M.D. Dief Gervices Intensive Care Unit Chigan Medical Center	Obstetrics & Gynecology

Albert Sosin, M.D. Farmington, Michigan

Lawrence Stocker, M.D. Southfield, Michigan

Bernard Toft, M.D. Warren, Michigan

William Weil, M.D. Department of Human Development Michigan State University East Lansing, Michigan

Pediatric Allergy

Ophthalmology

. Pediatric Allergy

Pediatrics

#### Name

Charles Whitten, M.D. Professor Pediatrics Children's Hospital of Michigan Detroit, Michigan

Paul Woolley, M.D. Professor and Chairman Pediatrics Children's Hospital of Michigan Detroit, Michigan Specialty

Pediatrics

Pediatrics



					App	endi	× IV					A.	A	-11
	Ad. 7.		M	linimal	Car •	e Pla	an Che	$\frac{ckli}{\omega}$	$\frac{st}{2}$	÷`	She	> His		
	ditional information (be specific)	c. generalized itching	b. abdominal pain	<ul> <li>a. paroxysmal coughing with possible vomiting</li> </ul>	Previous or associated symptoms	Exposure to allergens	Previous or associated occurrence of upper respiratory infection	Previous attacks of asthma	Personal history of allergies	Family history of allergies	ould include information on:	story	As thma	
													Probably On Patient Record If Done	ESSE
					-								Probably Not On Patient Record If Done	NTIAL
													Probably On Record If Done	NON ESSI BUT RECOI
													Probably Not On Record If Done	AMENDED
							-						Probably On Record If Done	NOT RECO
				•								·	Probably Not On Record If Done	OMMENDED
•													COMMENTS	

HENEMAL CARE PLAN CHECKLIST



MINIMAL
CARE
PLAN
CHECKLIST

2.	Additional tests: (be specific)	1. Chest X-ray	Should include:	C. Diagnostic test		(ne sheciiic)	Additional information	4. Check for evidence of pharyngitis	3. Examination of barrel chest	<ol> <li>Condition of accessory muscles of respiration</li> </ol>	· 1. Respiratory functioning	Should include:	B. Physical examination	Asthma - 2 -	A-12
						- ,								Probably Probabl On Not On Patient Patient Record Record If Done If Done	ESSENTIAL
	-					 								y Probably On Not On Record If Done If Done	NON ESSENTIAL BUT RECOMMENDED
					8									Probably Probably On Not On Record Record If Done If Done	NOT RECOMMENDED
														COMMENTS	

٩



$\sim$
-
7
~
1
-
2
5
-
-
-
~
5-
>
-
$\overline{\mathbf{x}}$
-
1-2
-
<u> </u>
F.
Ē
L
LAN
ΓVΝ
LAN
LAN (
LAN C
LAN CI
LAN CHU
LAN CHE
LAN CHEO
LAN CHEC
LAN CHECK
LAN CHECK
LAN CHECKL
LAN CHECKL
LAN CHECKLI
LAN CHECKLIS
LAN CHECKLIS
LAN CHECKLIST
LAN CHECKLIST

• Diagnosis: Please list that finding or combination of findings that would lead to a definitive diagnosis of acute or chronic asthma. Please be	As thma -3-	
	Probably On Patient Record If Done	ESSEN
	Probably Not On Patient Record If Done	TIAL
	Probably On Record If Done	NON ESSE BUT RECON
	Probably Not On Record If Done	ENT IAL MENDED
	Probably On Record If Done	NOT REC
	Probably Not On Record If Done	OMMENDED
	COMMENTS	

A-13 .

specific, and quantify whenever possible: ა • 4 ш • Chronic Asthma <u>ب</u> Acute Asthma 2. 4 ι u ŀ Ξ.

•



MINIMAL CARE PLAN CHECKLIST

Additional treatement (be specific): 7.	<ul><li>b. tracheotomy</li><li>6. Parent/patient education</li></ul>	<ul> <li>4. Antibiotics if infection is present</li> <li>5. Hospitalization for</li> <li>a. oxygen</li> </ul>	<ul> <li>c. Theophylline</li> <li>2. Corticosteroids</li> <li>3. Expectorants</li> </ul>	<ul> <li>Treatment for acute asthmatic attacks should include: (Please use P for primary care provider and/or S for specialist; specify type of S).</li> <li>1. Bronchodilators <ol> <li>Epinephrine</li> <li>Isoproterenol</li> </ol> </li> </ul>	A-14 . As thma a
					ESSENTIAL Probably On Patient Record If Done
-					NON ESSENTIAL BUT RECOMMENDED Probably Probably On Record If Done
·					NOT RECOMMENDED Probably On Record If Done If Done
					COMMENTS



2. check-ups at intervals	<ol> <li>planned management program</li> </ol>	specify type of <u>S</u> )	F. Follow-up (Please use P and S;	:	A maintenat recomment (pe operation).	Additional treatment (he enclific) .	a. environmental management	3. Parent/patient education	c. Others (specify)	b. Corticosteroids	a. Theophylline	2, medication	1. hyposensitization	Should include:	Treatment for chronic or recurrent asthma	-5-	Asthma	
_												•				Record Re If Done If	Probably Pr On No Patient Pa	ESSENTI
 												<del></del>		-	-	Done	obably t On tient	AL
						1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1							ł	ė 		Record If Done	Probably On	NON ESSE BUT RECOM
												, , , ,				Record If Done	Probably Not On	MENDED
				· · · ·					•							Record If Done	Probably On	NOT RECO
	-															Record If Done	Probably Not On	MAENDED
				1													COMMENTS	

MINIEME CARE PLAN CHECKLIST



MINIMAL CARE PLAN CHECKLIST

				_		A-16
Other measures:	acute episodes within (time period) 3. reduction of number of disability days (absence from school/work, or days restricted to the home) within (time period)	<ol> <li>cessation of acute symptoms within(time period)</li> <li>reduction of number of recurrent</li> </ol>	3. Expected outcome of treatment Should be measured by:	Additional follow-up (be specific): 3.	Asthma -6-	
3					Probably Probabl On Not On Patient Patient Record Record If Done If Done	ESSENTIAL
•	12				y Probably On Record If Done Not On Record If Done	NON ESSENTIAL BUT RECOMMENDED
					Probably Probably On Not On Record Record If Done If Done	NOT RECOMMENDED
					COMMENTS	

• .

-



--

. .

`\

•

## Appendix V

.

## Discussion Paper - Minimal Care Plan <u>ASTHMA</u>

_		Agreement	No Agreement
A. H	istory		
1.	Family history of allergies		
2.	Personal history of allergies		
3.	Previous attacks of asthma		
4.	Previous or associated occurrence of upper respiratory infection		
5.	Exposure to allergens		- -
6.	Previous associated symptoms		
	a. paroxysmal coughing with possible vomiting		
ан. Та	b. abdominal pain		
	c. generalized itching		
7.	Relation to emotional stress		
8.	Symptom review with relation to aller- gies		
9.	Previous response to anti-asthmatic medications		
10.	Medications patient is currently on		
11.	Description of attacks		•
12.	Geographic or environmental variability		•
13.	Persistence of symptoms, i.e. is pa-	•	·
	tient well between attacks		
<u>B.</u> P	hysical examination		
Sho	uld include:		

A-17



ASTHMA

.

۰.

.

•

## Discussion Paper - Minimal Care Plan

		Agreement	- No Agreement
1.	Respiratory functioning		
2.	Condition of accessory muscles of res- piration	• .	
3.	Examination of barrel chest		
4.	Check for evidence of pharyngitis		
5.	Check for clubbing		
6.	Presence of skin rash		
7.	Colon-cyanosis		-
<b>8.</b>	Check for otitis		
9.	Condition of nasal mucous membranes		
C. D	iagnostic test		
Sho	uld include:		
1.	Chest x-ray		
2.	Pulmonary function tests		
3.	Ventilating function tests		
4.	Quantitative Immunoglobulin		
5.	Sweat tests		
6.	Blood gases		· .
7.	Skin tests		
8.	Nasal or sputum smear for eosinophile		· ·
9.	Adrenalin trial		4
Acu	te Asthma		
1.	Family history of allergy or asthma		
2.	History of wheezing	1	

. .

-



ASTHMA

.

. . . .

.

-

+

## Discussion Paper - Minimal Care Plan

-

		Agreement	No Agreement
3.	Expiratory wheezing on PE (bilateral)		
4.	Over inflation-chest x-ray		
5.	Pulmonary function tests (general cate- gory)		
6.	IGE		
7.	FEV1, down		
8.	RV, up		
<u> </u>	Nasal eosinophile		
10	. Dyspnea		
11	. Relation to respiratory infection		
12	<ul> <li>Past history of wheezing responding to bronchodilator</li> </ul>		
13	. Wheezing response to Adrenalin		
14	. Type of onset		,
CH	RONIC ASTHMA		
1.	History of recurrent wheezing attacks		
2.	Wheezing on PE or exertion		
3.	Emphysematous changes		
4.	Relation to infection		•
5.	X-ray, chronic over inflation		· ·
6.	Barrel chest	,	
7.	Response to bronchodilator		
8.	Response to Adrenalin		
9.	Family history of allergy or asthma		·
10	. Blood gases		

Ber



.

## Discussion Paper - Minimal Care Plan

	Agreement	No Agreement
<ol> <li>Absence of clubbing</li> <li>FEV1, down</li> <li>RV, up</li> <li>Eosinophiles</li> </ol>		
<u>E. Treatment</u> for acute asthmatic attacks ( <u>P</u> and/or <u>S</u> ) Should include:		
<ol> <li>Bronchodilators</li> <li>a. Epinephrine</li> <li>b. Isoproterenol</li> <li>c. Theophylline</li> <li>Corticosteroids</li> </ol>		
<ol> <li>3. Expectorants</li> <li>4. Antibiotics if infection is present</li> <li>5. Hospitalization for</li> </ol>		*
<ul> <li>a. oxygen</li> <li>b. tracheotomy</li> <li>6. Parent/patient education</li> <li>7. IPPB with isoproterenol</li> <li>8. Hydration</li> </ul>	•••	••
<u>Treatment</u> for chronic or recurrent asthma Should include: 1. Hyposensitization	-	


ASTHMA

=

•

# Discussion Paper - Minimal Care Plan

	Agreement	No Agreement
2. Medication		
a. Theophylline		
b. Corticosteroids		
c. Others (specify)		
3. Parent/patient education		
a. environmental management		
4. Cromolyn		-
<u>F. Follow-up</u> ( <u>P</u> and/or <u>S</u> )		
Should include:		
1. Planned management program		
2. Check-ups atintervals		
3. Weekly hyposensitizing injections		
G. Expected outcome of treatment		
Should be measured by:	_	· · · ·
1. Cessation of acute symptoms within		
(time period)		•
2. Reduction of number of recurrent acute		
episodes within(time period)		
3. Reduction of number of disability days		
(absence from school/work, or days re-		
(time period)		
4. Lung functions	-	
5. Physical capabilities		

A-21



### Appendix VI-A

### EPSDT SCREENING ABSTRACT FORM

TRACER EVALUATION STUDY OTITIS MEDIA

## I. General Information to be Filled In for All Referrals

1	1.	Card Sequence Number				
3	2.	Tracer Referral Number	r	Ears-Otitis Med	ia - 1	
	3.	Clinic Number	۰.			•
12	4.	Client's Name:		fir	st	initial
	5.	Recipient I.D. Number			•	
17 ]	6.	Date of Screening			,	
	7.	Please circle all othe	er re	ferrals for this	chil	d and enter
18		a. Vision	نة i.	Lead	s.	Nose
_	· .	b. Hearing	k.	Height	t.	Mouth
	•	c. VDRL	1.	Weight	u.	Face
		d. Hematocrit	m.	Head Cir.	, v.	Hair
		e. Sickle Cell	n.	Blood Pressure	w.	Neck
		f. G.C. Culture	ο.	Other	x.	Skin
		g. T.B.	P.	Cranium	у.	Chest and Eack
		h. Urine Sugar	q.	Ears	z.	Abdomen
-		1. Albumin	<b>r.</b>	Eyes	aa.	Genitalia
					bþ.	Muscle Tone

- cc. Arms and Legs
- General dd.

18

2 3

4 5

]

]

J

]

]

J

7\_8 9 10 11 12 13

415

Mo.

15 17

Day

#### Information to be "sed for Assignment to the Sample II.

19 20

- WHITE REFERRAL FORM (Provider's Copy) A.
  - 8. Diagnostic Information (if more than one category
    - below fits, code their sum)
    - 01
    - Diagnosis of chronic Otitis Media Diagnosis of chronic Otitis Media
    - condition related to Otitis 03 Diagnosis of <u>Ear</u> Media, such as Otitis Externa, Mastoiditis, Perforated

Tympanic Membrane, Ear Inflammation (Unspecified)

record exact words

A-23

Diagnosis of Ear \_ condition definitely not related 0.8 to Otitis Media, such as inflammation of lobe due to piercing, or congenital malformation of ear

If yes, add name and recipient ID to appropriate referral list.

Tracer?

- specify condition Ear -16 Diagnosis of condition(s) not related to \_\_\_\_ (check in box at left specify if possible tracer(s)) 32 No indication of pathology, such as diagnosis of
- healthy child or no treatment needed
- 88 Form in file, no diagnostic information

99 Form not in file

INSTRUCTION: (a) If <u>01</u> or <u>02</u> is coded above either individually or as part of a combination, Proceed. Fill in ALL following information. Ignore all stops. This case is now part of the sample, and no box can be left blank.

Day Yr.

Mo

9. Date of Examination or Service (if in file) Code 99 99 99 if not in file or blank



- B. PINK REFERRAL FORM (Clinic Copy)
  - 10. "Reason for Referral" Information
    - **1** Detailed: <u>"PossibleOtitis Media"</u> "Draining Ears," "Middle Ear Infection"

·2 Not Detailed:

record exact words

A-24

<u>3</u> <u>Ear</u> referral only for condition definitely <u>not</u> related to Otitis Media (such as "inflamed lobe (external) - pierced ear")

#### record exact words

- 8 "Reason for Referral" left blank
- 9 Unable to locate form

INSTRUCTION: (b) If 3 is coded above (and instruction (a) does not apply) STOP. Case is eliminated from sample.
 (c) If 1 is coded above, PROCEED on through next stop.
 Case may be included in sample and boxes 28,29 cannot be left blank.

C. GREY MEDICAID SCREENING SUMMARY

11. "Physical Inspection" under Ear

<u>1</u> "Ear pain," "Draining Ears," "Infection," "Ear Problem"
other Otitis Media:-related symptoms

record exact words

record exact words

2 Ear symptoms definitely <u>nct</u> related to <u>Otitis Media (such as</u> <u>"inflamed lobe - pierced ear," other external problems)</u>

8 "Physical Inspection" left blank

9 Unable to locate form

INSTRUCTIONS: (d) If 2 is coded above (and instruction (a) and (c) do not apply) STOP.

28

27-

29

NURSE FOLLOW-UP NOTES (OR CLINIC FOLLOW-UP NOTES) D.

- Notes indicate follow-up was done regarding: 12.
  - 1 Appointment keeping
  - 2 Patient adherence to prescribed care
  - Both of the above 3
  - 4 No follow-up recorded

13. Information on child's diagnostic status following referral

- Specific mention of diagnosis of Otitis Media 1
- Specific mention of diagnoses other than Otitis Media . 2

(Check box at left if tracer) specify diagnosis(es) 3 Diagnosis of Otitis Media plus other diagnosis(es) (Check box at left if tracer) specify other diagnosis(es)

A-25

- 4 Child appeared for treatment, no specific diagnosis mentioned
- 5 Child appeared for treatment, diagnosis of healthy child
- 6 Recorded that child failed to appear for any treatment
- 7 Notes indicate follow-up was initiated but there is no information on diagnosis or treatment status (client may have moved or offered no information)

specify nurse's relevant remarks

No follow-up 9

INSTRUCTION: (e) If 6 coded above (and instruction (a) does not apply) STOP. This case is eliminated from sample.

Tracer?

30

If yes, add name hd recipient ID appropriate referral list



	III.	Information Needed for All Cases Not Yet Eliminated
	31	E. HEALTH HISTORY PRIOR TO SCREENING
		14. History of Otitis Media
		1. Otitis Media Treatment in Past Year
		White Form: Ques. 32 is Yes with Otitis Media written in
-		Yellow Form: Ques. 22 is Yes with written in Otisis Media
		OR Grey Form: Lines 70,76 have UNDER CARE (UC)
-		Written in Provious Otitis Media But No Treatment Specified
].	••••	White Form: Oues 28 is Yes with Otitis Media written in
-		Yellow Form: Oues, 18 is Yes with Otitis Media written in
		OR Grey Form: Lines 70,76 have Otitis Media, written in
7		3. No mention of previous Otitis Media
1	32	4. Neither form is on file
-1		15. History of Ear problems
1		1. Ear Related Treatment in Past Year
7		White Form: Ques. 32 is Yes with Ear problem, Ear-ache
].		Ear .etc. written in
7		Yellow Form: Ques. 22 is Yes with Ear problem, Ear-ache,
1		Earetc. written in
1	·	specify remark
1		OR Grey Form: Lines 70,76 have Ear problems .UNDER CARE (U.C.)
-7		Written in .
1	•	2. Frevious Ketated Symptoms But No Treatment Specified
1		Yellow Form: Oues. 6 is Yes
1	•	OR Grey Form: Lines 70.76 have Ear related remarks written in
7	·	Ear trouble, Ear aches, Draining Ears, Deafness
1	•	
7		specify remark
1		3. No Previous Ear Related Symptoms
		White Form: Both Ques. 13 and 14 are No; or one No and one Blank
		Yellow Form. Ques. 6 is No
		AND Grey Form: Lines 70.76 have no Far related remarks
	1	8. Unknown
-	1	White Form: Both Ques. 13 and 14 are Blank
	7	Yellow Form: Ques. 6 is Blank
R-	Jorm not in	file AND Grey Form: No related remarks

.

A-26

.



	· A-27
16.	(Tonsillitis or) History of Related Symptoms (3 colds or throat infections per year)
	Related symptoms 1. White Form: Ques. 16 is Yes or Ques. 28 "Tonsillitis" is circled
	Yellow Form: Ques. 7 is Yes or Ques. 18 "Tonsillitis" is circled
OR	Grey Form: Lines 70,76 have frequent colds, throat infections,
	tonsillitis written in
	specify remark
	2. White Form: Q. 16 is No and Q. 28 Tonsillitis not circled
	Yellow Form: Q. 7 is No and Q. 18 Tonsillitis not circled
AND	Grey Form: Lines 70,76 have no related remarks
	about frequent colds or Tonsillitis
	8. Questions not filled in
· .	9. Neither form is on file
•	
17	. If any of the above mentioned details (ques. 14-16) were found on line
	70-76 of the Grey Form, was the history referral box checked? (62
	<u>1. Yes</u>
	2. No



#### PROVIDER DATA SUMMARY FOR

#### OTITIS MEDIA

A. GENERAL INFORMATION - TO BE FILLED IN PRIOR TO CALLING ON PROVIDER

1. Name of Child:

2. Study I.D. Number

3. Date of consent to participate in study \_\_\_\_\_

4. Provider of service

Name and title

Organization title

#### Address

5. Referral status

- 1. Initial referral from screening clinic
- 2. Secondary referral from another physician
- 3. Other \_\_\_\_\_\_ Specify
- 8. Unknown
- Mo. Day Yr.

B. INFROMATION FROM MEDICAL RECORDS

Mo. Day Yr.

8. Total number of visits following (and including first visit) related to Otitis Media.

9. Previous relationship between provider and patient

- 1. Has seen patient within past two years for this tracer
- 2. Has seen patient within past two years but not for

this tracer



 Has seen member of patient's family but not patient within past two years

-

H-25

- 4. No previous contact
- 8. Unknown

E

Please check the appropriate categories for all components of care listed below. Circle all criteria in parentheses found on chart. Record all additional pertinent criteria below.

۱.	Hist	tory	Yes	NO	NM
	1.	Presenting symptoms (pain, drainage, fever)			
		Additional symptoms:			
	1a.	Duration of symptoms			•
		3 mos. or more, less than 3 mos NM			
	2.	History of middle ear infections or symptoms		_	
		Detail on chart:			
					•
	3.	Associated infections of respiratory tract		_	
		Detail on chart:			
		·			
	4.	Specification of allergies? (Eczema?)			
		Additional specification:			
	5.	Check any of the following criteria mentioned on record:			:
		a. Family history	•		
		b. Congenital Anomalies			
		c. History of previous treatment			
		d. Other diseases			



В	Ph	ysi	.ca	1 E>	cami	nat	:ion
				and the second s			

A-30

1. Tympanic membrane abnormal?

(redness, bulging, perforation, blue, dull, thick, full retracted) Additional detail:

2. Temperature abnormal? (97.6 >x> 99.6)

Degrees:\_\_\_\_\_

3. Pharynx abnormal?

(Exudate, petecheae, blood spots, erythema)

Additional detail:

4. Check any of the following criteria mentioned on record

a. Auditory canals observed for abnormality?

b. Cervical lymph nodes palpated?

c. Nose checked for obstruction, discharges, or inflammation?

d. Edema or tenderness over mastoid?

#### e. Facies

f. Abdomen checked?

g. Chest checked?

#### C. Diagnostic Tests

1. Check any of following test done and fill in results

a. Audiometric examination

Results:

b. Movement of tympanic membrane

Results:

\_\_\_\_\_ c. Culture drainage

Results:

d. X-ray

Results:

D. Diagnostic Information (if more than one category below fits, code their sum)

A-31

- 01 Diagnosis of acute Otitis Media
- 02 Diagnosis of chronic Otitis Media
- <u>04</u> Diagnosis of ear condition related to Otitis Media, such as Otitis Externa, Mastoiditis, Impacted Cerumen, Perforated Tympanic Membrane, inflammation (unspecified)

record exact words

<u>08</u> Diagnosis of ear condition definitely unrelated to Otitis Media, such as inflammation of lobe due to piercing, or congenital malformation \_\_\_\_\_\_

specify condition

1:er ? 16

Diagnosis of condition(s) not related to ear

#### specify

(check box at left if possible tracer(s))

- 32 No indication of pathology, such as diagnosis of healthy child or no treatment needed
- 88 Record on file, no diagnostic information
- 99 Record not in file

# E. <u>Treatment</u> Yes No NM 1. Penicillin (or other antimicrobials) prescribed? \_\_\_\_\_\_ Detail: \_\_\_\_\_\_ 2. Antihistamines prescribed? \_\_\_\_\_\_

Detail:



			A-J
Yes	No	NM	
		<u> </u>	

0

	3.	Parent edu	cation?			—
		Detail:				•
	4.	Tonsillect	omy?		<u> </u>	
		Detail:				
	4a.	If yes was	there mention of: (check which)			
		1.	Peritonsillar abcess		<sup>-</sup>	
2	or	2.	Unilateral tonsillar enlargement			
2	or	3.	Obstruction			
		Detail:				
	5.	Adenoidecto	ошу?			
		Detail:				
	5a.	If yes, is	there mention of (check which)			<u> </u>
		1.	Recurrent Otitis Media of at least a frequency	of		
	•		3 episodes per year			
	or	2.	Recurrent Otitis Media - frequency of at least 3	3		
			times within 18 months <u>with</u> hear loss			
	6.	Check any o	of the following criteria which are mentioned in	the		
		record:				
		a	Ephedrine prescribed			
		b	Nose drops			
		c	Shepards tubes			
		d	Myringotomy			
		e	Analgesics	÷		
F	Fol1	.cw-Up		Yes	No	NM
	1.	Was patient	re-evaluated			
		If yes, ind	icate when			
		Within	weeks or withinmos.			

]

1

1

]

1

]

]

]

]

]

]

]

]

]

]

]

]

A-32



Yes	No	NM
-----	----	----

indicate status as described in record

2. Was hearing re-evaluated?

Indicate status as described in record

3. Check if following criteria mentioned during follow-up episode

. .

a. \_\_\_\_\_ Parent education

#### G. <u>Referral Status</u>

 $\square$ 

- 1. Was patient referred:
  - Yes No

Organization

Address,

H. Information from sight visit and A.M.A. register

1. Provider's ethnic status

- 1. Caucasian
- 2. Black
- 3. American Indian
- 4. Spanish surname
- 5. Other \_\_\_\_

specify

8. Unknown



- 2. Where trained
  - 1. U.S. or Canada
  - 2. Foreign
  - 8. Unknown
- 3. Provider's specialty status
  - 1. General medical practitioner
  - 2. Osteopathic practitioner
  - 3. General pediatrician
  - 4. specialized pediatrician

subspecialty

- 5. Otolaryngologist
- 6. Audiologist
- 7. Other

specify

8. Unknown

4. Provider's organizational affiliation

- 1. Solo private practice
- 2. Group private practice single specialty
- 3. Group private practice multi specialty
- Public ambulatory clinic freestanding, <u>e.g</u>. M&I, C&Y, Health Center, with DIFFERENT organization from screening clinic
- Public ambulatory clinic freestanding, <u>e.g</u>. PRESCAD with SAME organization as screening clinic
- 5. Provider's year of birth

PATIENT INTERVIEW: OTITIS MEDIA

pl: Complete from clinic abstract

p2: Introduction:

I am from the University of Michigan School of Public Health. Did you receive a letter/telephone call a few days ago? (If Yes, go to next paragraph.) If No, then as follows. I am a member of a group which has been asked to talk with some people who have been through the (Medicaid Screening Program?) to find out what they think about it.

Records at the Screening Center report that \_\_\_\_\_ might have had a problem with his/her ears. Could I ask you a few questions about that?

Yes: Continue

No

Questions 7-11 are an attempt to determine if the problem was already known, and if so, already under care.

Questions 12-16 related to action at screening clinic. Are we really interested in anything except #14?

Questions 17-18 determine whether a doctor's visit was made.

19 deals with difficulty in getting to doctor.

20 deals with doctor's activity; do we want this?

21-23 deal with knowledge, use and effect of medication (ques. 23 is a measure of expected outcomes 1.)

24-25 deal with doctor follow-up (24 checks on minimal care F-U)

26 determine whether additional data is needed from another provider

27 is a subjective overall assessment of benefit of care

28 gets at recurrence, and if so, reaction

29-30 is an assessment of amount and effect of hearing loss

- 31 is to determine whether treatment is complete

What, if anything, do we want in the general health status area?

# PARENT-CHILD INTERVIEW RECORDING FORM TRACER EVALUATION STUDY OTITIS MEDIA

A-36

#### DRAFT

1.	Chi	ld's Name:			
		last	first	i	initial
	Ide	ntification Number:			
2.	Res	bondent's Name:	first		initial
	D-1		LLISC		LIILLAI
	Rela	itionship:			
	1.	Mother			· .
	2.	Father			
	3.	Guardian			
	4.	Other			
3.	Tele	ephone Number: ()			
4.	Date	e of EPSDT Screening:			
5.	Syne	opsis of "Reason for Referral":			
6.	Prov	vider(s) to whom child was referred:			
	Name	e or Org. Location		Purpose	Appt. Date
			•		
Int	rodu	ction:			
LET	'S ST	TART BY TALKING ABOUT PROBLEMS THAT		MAY HAVE OR	HAS HAD WITH
WIT	H HIS	S/HER EARS.			•
7.	When	n you went to the screening clinic last		(month	ı), did you
	<b>t</b> hi	nk there was anything wrong with		's ears	?
	1.	Yes		•	
	2.	No (go to #9)			
	3.	D/K, D/R, no response			
8.	Why	did you think something was wrong?			
	1.	Pain in or around the ear			
	2.	Pain or soreness in the neck or throat	:		
	3.	Fever			
	4.	Difficulty hearing sounds (like people	e talki	ng or the TV	<i>i</i> )
	5.	Discharge from the ear			
	6.	Any other symptoms or problems or come	laints	(Describe)	



	_	
9	Was under a doctor's care for a medical condition	at the
2.	time you went to the screening clinic?	
	1. Yeswhat for?	
	1. Ear, hearing, or related	•
	2. Other medical problem	
	3. D/K. D/R. no response	
	DETAIL:	
	2. No	
	What treatments was receiving at the time	
	you went to the screening clinic?	
	Medication:	
	Other:	
	When waslast seen by the doctor?	
10	(Date last seen previous to EPSDT Screening)	
10.	Has ever had ear problems?	
	About how many times has had ear problems	
	(infections, aches, etc.)?	
	e.g. once a year, twice a year, etc.	
	When was the last timehad a problem with	
	his ears? (MONTH, YEAR)	
	What did you do about it?	
	1. Seen by a physician	
	2. Not seen by a physician	
	3. Other care	
	4. No care - went away	
	What happened with that illness:	
	1. Symptoms disappeared	
	2. Symptoms continued	
	3. Hearing became poorer	
	4. Other	
11.	Has's hearing ever been tested?	
	1. No (go to 12)	
	2. Yes	
	When was the last time's hearing was tested before	you
	went to the screening clinic? (MONTH, YEAR)	

A-37

went to the screening clinic? (MONTH, YEAR)

•

and the

1

2

```
Where was that?
     What did they find?
     What did they do?
          1. Previous hearing deficit known - significant loss
          2. Previous hearing deficit known and treated
          3. Previous hearing deficit minimal or non-functional
          4. Hearing previously within normal limits
          5. Unknown, D/K, D/R
 VERY GOOD. NOW I WOULD LIKE TO ASK YOU
 A FEW QUESTIONS ABOUT YOUR EXPERIENCE
 AT THE SCREENING CLINIC AND YOUR REFERRAL
 TO
                                         's ears after he/she
12. What did they tell you about
     was examined at the clinic?
     (RECORD VERBATIM)
     (CODE)
     1. Answer basically agrees with EPSDT reason for
         referral - e.g. "ear infection," "ear ache," "hearing
         problem"
     2. Answer unrelated
                                                                     Π
     3. D/K, D/R, no response
13. Was an appointment made for _____ to be
     checked by a doctor?
     1. Appointment made at time of screening
     2. Referred to provider - parent to make appointment
     3. Parent to obtain service independently (e.g. go to family
         physician)
     4. Other arrangement
     5. D/K, D/R, no response
                                                                     \square
14. Had _____ been to that doctor (or clinic) before?
     1. Provider is child's usual primary care resource, e.g.
         child's family physician or pediatrician
     2. Child has been treated there previously on other basis
     3. Child never previously seen by provider
     4. D/K, D/R, no response
15. What kind of doctor or clinic is the place you were referred to?
     (enerialty)--was
```


	1. General medical practitioner	
	2. Osteopathic practitioner	
	3. Pediatrician	
	4. Other specialist	•
	5. Other	
	6. D/K,D/R, no response	
16.	Who suggested going there?	
	1. Respondent or family member	
	2. Member of EPSDT staff	
	3. Other	
	4. D/K, D/R, no response	
17.	Did you go there?	•
	1. Yes (go to #18)	
	2. No	
	Did you go to some other doctor?	
	1. Yes (go to #18)	
	2. No (go to #28)	
18.	When did you first go there?	
	Date:	
19.	Did you have any difficulty in getting	
	to the appointment with the doctor? (e.g. child care,	
	transportation, illness in the family, etc)	•
	· ·	
20.	What did the doctor do when you went there? Did he give a	
	general examination or didhe just look at's ears	
	and throat?	
	1. Physical examination	
	2. History	
	3. Hearing test	
	4. Other	
21.	Did the doctor give any medicine or a prescription	
	for medicine?	
	No (go to #24)	
	Yescontinue	
	What kind of medicine?	
	Do you remember the dosage?	
	How often was it to be used?	
	How long was it to be used?	



	Did you follow the doctor's instructions (dosage, duration)?	
22.	Did you have any problems in obtaining the medicine or in getting to take the medicine according to the instructions you were given?	
23.	<pre>How did the medication take care of's ear problem? 1. Symptoms disappeared - how long did it take? 2. Symptoms were reduced but did not disappear - how long before it got better?</pre>	
24.	Did anyone at the doctor's office check with you to see how 's ear problem was getting along? For example, did they	
	<ol> <li>Give you a postcard to mark and return</li> <li>Ask you to call them on the telephone</li> <li>Ask you to bring back for a checkup in a certain number of days? If yes, when</li> <li>Call you on the telephone to check</li> <li>Send someone to visit, like a public health nurse</li> <li>Other</li> </ol>	
25.	Was''s hearing retested <u>after</u> this treatment was completed? 1. Yes FINDINGS:	
	<ul> <li>2. No</li> <li>3. D/K, D/R, no response</li> <li>DATE: .</li> </ul>	
26.	Did the doctor you went to suggest that you obtain any other kind of treatment, or refer you to another doctor for further study or If yes, to whom? Did you go?	care?
27.	If yes, repeat questions 18-26 No Has's ear problem been helped by the treatment he/s received?	he
	DETAIL	

A-40

١

- - -

28. Has \_\_\_\_\_\_ had any ear trouble <u>since</u> he/she was tested by the doctor (if did keep appointment)? tested at the screening clinic(if didn't keep appointment)? No

Yes--RECORD:

dates

symptoms

care sought

outcomes

29. Does \_\_\_\_\_ now have any difficulty in hearing?

(If yes), How much would you say?

Very hard of hearing

Some problem in hearing

Just a little hard of hearing

30. How has \_\_\_\_\_'s hearing loss affected his/her

Getting along with members of the family

Getting along with other children/teenagers(peers)

At school

General Happiness

Need for attention, compared to other children

In other ways

31. Do you expect \_\_\_\_\_\_ to get any other treatment or services over the next few months?

NOW I WOULD LIKE TO ASK YOU JUST A FEW GENERAL QUESTIONS ABOUT \_\_\_\_\_'S GENERAL HEALTH AND ACTIVITIES.

<u>N.B.</u> This section of the parent-client interview is currently being developed. Included will be material relating to current social function, achievement, other health-related problems, and measures of sick days, bed days, and other morbidity indices over the previous quarter.



--Date of Interview:

- --Interviewer:
  - 1. RM
  - 2. RLC
  - 3. BJL
  - 4. WW
  - 5. VRS
  - 6. --
  - 7. --
  - 8. --

--Interview time, minutes:

--Interviewer's assessment of respondent's

Response to follow-up inquiry:

Ability to provide valid, reliable information

Situation during the interview--any factors which detracted from the interview or respondent's attention

--Other remarks





### Appendix VII

#### DECISION PROCEDURE FOR INCLUSION IN STUDY POPULATION

#### (See Chart)

+ = specific mention of tracer

- = specific mention of a condition unrelated to tracer
- ? = mention of a condition suggestive of or related to tracer
- 0 = no relevant information
- NS = no show (definite indication that patient did not keep appointment)
- → = proceed with decision process to next source of information
- \$ = stop decision process and exclude
- **1** = stop decision process and include in study group or sub-group

### DECISION RULES

- 1. If in columns 1 and/or 2, exclude.
- 2. If 0 in columns 1 and 2, and in columns 3, 4, or 6, exclude from both study groups.
- If <u>not</u> in columns 1 and/or 2 and NS in either column 4 or 6, exclude from both study groups.
- If <u>not</u> in columns 1 and/or 2, and + in columns 3, 4, 5, <u>or</u> 6, include in major study group.
- 5. If <u>not</u> or 0 in columns 1 and/or 2, and in columns 3, 4, 5, <u>or</u> 6, include in negative diagnosis sub-group.
- 6. If <u>not</u> or 0 in columns 1 and 2, and <u>not</u> + or in columns 3, 4, 5, or 6, exclude, but record this occurrence.



		·						A-44			
	REFERRAL LIST (by category)	(by category) DECISION RULE	SOURCES OF INFORMATION						ACTION TAKEN		
			- SCREENING SUMMARY	REFERRAL FORM V (top half)	DIAGNOSTIC RETURN SORM	FOLLOW-UP A NOTES	BILLING TAPE (merged tape)	PROVIDER'S MEDICAL RECORD	INCLUDE IN MAJOR STUDY GROUP	INCLUDE IN NE- GATIVE DIAGNO- SIS SUB-GROUP	EXCLUDE
	1	1	- 4								x
	2	1	? →	- 4							x
	3	1	0 ->	- +		_					x
	4	2	0 ->	0 ->	- *						x
	5	2	0 ->	0 ->	0 ->	- *					x
	6	2	0 ->	0 →	0 ->	0 →	>	- +			x
	7	3	? →	+ ->	0 ->	NS 🎍					x
	8	3	+ ->	+ →	0 ->	0 ->	0 →	NS 🔸			x
	9	4	+ ->	+ ->	+ 1				x		
	10	4	+ ->	+ ->	0 →	+ 1			x		
	11	4	? ->	? ->	0 ->	0 →	+ 1		x		
	12	4	0 →	? →	0 ->	0 ->	+ 1		x		
	13	4	+ ->	+ ->	0 ->	0	0->	+ 1	x		
-	14	5	+ ->	+ →	_ 1					x	
	15	5	+ ->	+ ->	0 ->	_ 1				x	
	16	5	+ ->	+ ->	0 ->	0 ->	- +			x	_
	17	5	? →	? →	- 1					x	
	18	5	? →	? →	0 ->	- 1				x	
	19	5	? ->	? →	0->	0 ->	- 1			x	- -
	20	5	0 →	+ ->	- 1					x	
	21	6	? ->	+ ->	0 ->	0 ->	0 ->	? ↓			x
	22	6	0 →	? →	0 →	0->	0->	0 +			x
	23	6	+ ->	+ →	? →	0 >	0->	? ↓			x
	N										





WILLIAM G. MILLIKEN, Governor

MAURICE S. REIZEN, M.D., Director

STATE OF MICHIGAN DEPARTMENT OF PUBLIC HEALTH

3500 N. LOGAN, LANSING, MICHIGAN 48914

October 31, 1974

Reuben Meyer, M.D., Project Director EPSDT Program Evaluation School of Public Health University of Michigan Ann Arbor, MI 48104

Dear Doctor Meyer:

In accordance with your request, transmitted by Mrs. Lois Lamont, the Evaluation of the Michigan Early Periodic Screening, Diagnosis and Treatment Program is designated as confidential research under the provisions of Act 39 of the Public Acts of 1957, as amended.

In accordance with this statute all information, records of interviews, written reports, statements, notes, memoranda or other data or records furnished to, procured by, or voluntarily shared with the State Health Director, or any person agency or organization which has been designated by the State Health Director as a medical research project shall be confidential and shall be used solely for statistical, scientific and medical research purposes. Any disclosure other than is provided for in Act 39 shall be a misdemeanor and punishable as such.

Sincerely,

Maurice S./Reizen, M.D. Director

CC: Paul Allen Lois Lamont Gerald Rice, M.D. John L. Isbister, M.D.





# Appendix IX

"Tracer Evaluation of Diagnosis and Treatment of EPSDT Referrals" Progress Report Meeting February 5, 1975, Lansing, Michigan

# Participants

Michigan Department of Public Health

R. Gerald Rice, M.D.	- Chief, Bureau of Maternal and Child Health
Avis Dykstra	- Nurse Consultant, Bureau of MCH
Anne Rossi	- Administrative Analyst, EPSDT Program Bureau of MCH
Thomas Kirk, M.D.	- Pediatric Consultant, Bureau of MCH
Lois Lamont	- Assistant for Planning & Evaluation
Richard Currier	- EPSDT Coordinator, Bureau of MCH
•	

Michigan Department of Social Services

Marilyn Hall	- Experimental & Demonstration Project Coordinator
Bruce Huckaby	- Director Policy & Planning Division
James Crawford	- Supervisor, Planning Section
Richard Hartman	- Supervisor of EPSDT Team - Medicaid Application

The University of Michigan Study Team:

Ruben Meyer, M.D Beverly Lingle Joanne Reuss Marianne Fahs O. Lynn Deniston George Williams 1





# THE UNIVERSITY OF MICHIGAN

### School of Public Health

PROGRAM OF STUDY IN MATERNAL AND CHILD HEALTH

EPSDT EVALUATION PROJECT

109 S. Observatory Ann Arbor, Michigan 48104 Tel. Area 313 – 764-5440

September 19, 1975

Ms. Shelby Minor Department of Health, Education, and Welfare Switzer Building 330 C. Street, S.W. Room 4322 Washington, D. C. 20201

Dear Ms. Minor:

At the request of Lynn Weimeister, the Demonstration Projects Coordinator for the Michigan Department of Social Services, I am sending you a copy of this project's Phase I report. Ms. Weimeister and I concluded that this was the quarterly report which you requested; it was submitted in February, 1975.

It is my understanding that you plan to circulate the report to the regional offices. We would welcome any comments or questions which arise from this exposure. I have enclosed only one copy, which you may, of course, reproduce. If you prefer, we can supply you with multiple, spiral bound copies at a charge of \$3.75 apiece. I am sure you appreciate that we are receiving numerous requests for copies of this report which our project budget cannot continue to cover. Please let me know if you would like us to supply multiple copies.

Again, I hope that you will transmit to us any comments or questions about the project.

Sincerely,

Beverly J. Lingle, M.A. Research Associate

BJL/elw Encl.: Phase I report cc : Lynn Weimeister



C. Lo UN IN C2 - 11 3. 750. University Control Thirthore: Maryu Mr. 21244

